

Appl. No. 10/721,120
Art Unit: 3617
Docket No: 0036-P033221US00



**Attachment A-3
Substitute Paragraphs for Specification**

Please substitute the following paragraphs for the corresponding paragraphs in the specification as filed.:

[0006] This object is achieved according to the invention in that the coupling members are designed as bolts which are aligned substantially parallel to the wheel axle of the auxiliary wheel and are connected to the wheel rim of the auxiliary wheel, each bolt having a head on the end region remote from the wheel rim, and wherein the receiving parts disposed on the holding part are slot-shaped recesses having an insertion zone, into which zone the heads of the respective bolts are insertable through displacement of the auxiliary wheel in wheel axle direction, and a retaining zone with protruding pieces into which zone the heads of the bolts are pushable through movement of the auxiliary wheel in the plane running substantially perpendicular to the wheel axle, are supportable on the protruding pieces, and are maintainable in this position through locking means.

[0009] Since the protruding pieces, holding the head of the bolts, of the slot-shaped recesses each have a protruding piece thickness that increases from the respective insertion zone toward the end remote from the insertion zone, and the support surfaces of the protruding pieces for the head of the bolts increase from the insertion zone, the advantage is attained that there is sufficient play for attaching the auxiliary wheel on the wheel of the vehicle, and an optimal fit is achieved through movement of the auxiliary wheel with respect to the wheel of the vehicle.

[0012] A further preferred feature of the invention consists in the shank of the bolt and the head of the bolt being cylindrical, the face between head and bolt shank being conically inclined (tapered), and the support surfaces of the protruding pieces being correspondingly beveled. This serves the purpose of making the attachment of the auxiliary wheel to the wheel of the vehicle even easier and has the effect that the auxiliary wheel can be maintained free of play on the wheel of the vehicle in attached state.

[0015] A further preferred feature of the invention consists in that the other end region of the locking bolt protrudes beyond the guide bush, and a cross bolt is fixed on this protruding area, by means of which the locking bolt is rotatable, and in that this cross bolt is supported on cheeks provided on the upper edge of the guide bush, which cheeks have an incline in the rotational direction of the locking bolt. Achieved with this design is that the locking bolt is able to be pulled out of the respective aperture without great effort.

[0024] Screwed onto the tire bolts 5 which are fixed to the wheel axle 4 are nuts 6 with which the wheel 1 is fixed to the wheel axle 4 of the vehicle. These nuts 6 have a longer length so that still another bolt 7 can be screwed on in each case. With these bolts 7 a dish 8 is attached to the wheel 1, onto which dish 8 a further plate 9 is screwed that is aligned perpendicular to the wheel axle 4.

[0026] Placeable on this wheel 1 of the vehicle is an auxiliary wheel 10. This auxiliary wheel 10 likewise comprises a wheel rim 11 on which a tire 12 is likewise put. Screwed onto the wheel rim 11 by means of bolts 14 is a spacer sleeve 13. Between this spacer sleeve 13 and the wheel rim 11 spacer bushes 15 can be put on the bolts 14, whereby, when using the same spacer sleeve 13 in each case with spacer bushes 15 having another length, the spacing of the auxiliary wheel 10 from the wheel 1 can be adjusted.

[0029] FIG. 2 shows a view from above of the spacer sleeve 13 and the plate 16 which are connected to the wheel rim 11 via the bolts 14. Fixed in the plate 16 are bolts 18, the axes of which are aligned parallel to the wheel axle 4. In the state where the auxiliary wheel is attached to the wheel of the vehicle, as shown in FIG. 2, these bolts 18 are inserted into slot-shaped recesses 19, and are held there, as will be described in detail later. These slot-shaped recesses 19 are provided in the further plate 9 which is covered by the plate 16 in FIG. 2.

[0030] Shown in FIGS. 3 to 6 are the design of the bolts 18, which are fixed to the plate 16, and the co-operation with the slot-shaped recesses 19, provided in the further plate 9 of the wheel of the vehicle. Each of the bolts 18 comprises a cylindrical shank 20 on which a head 21 is formed, which is likewise of cylindrical shape. The bolt shank 20 and the head 21 are fixed to the plate 16 of the auxiliary wheel via a bolt 22, as can be seen in FIGS. 5 and 6.

[0031] Provided in the further plate 9, which is connected to the wheel of the vehicle, are the slot-shaped recesses 19. One of these slot-shaped recesses 19 is shown in FIGS. 3 and 4. This slot-shaped recess 19 has at one end region an insertion zone 23 which is large enough for the head 21 of the bolt 18 to be able to move into the insertion zone. Remote from the insertion zone, the slot-shaped recess 19 is designed as a retaining zone provided with laterally running protruding pieces 25. As can be seen from FIG. 3, these protruding pieces 25 have a protruding piece thickness which increases from the insertion zone 23 toward the end of the retaining zone 24.

[0032] FIG. 5 shows the situation during attachment of the auxiliary wheel to the wheel of the vehicle in which the respective bolt 18 is inserted through the insertion zone 23 of the slot-shaped recess 19. Since the thickness of the protruding pieces 25 is less in this zone, there is play between the face 26, which is formed between the head 21 and the bolt shank 20, and which is conically inclined, and the supporting surfaces, which are likewise correspondingly inclined, of the protruding pieces 25. Through movement of the auxiliary wheel relative to the wheel of the vehicle, the bolt can be brought from this insertion position along the slot-shaped recess 19 into the retaining zone 24 at the end of the slot-shaped recess 19. Since the thickness of the protruding pieces 25 is larger here, no play exists anymore between the plate 16 of the auxiliary wheel and the further plate 9 of the wheel of the vehicle; the plate 16 thus abuts the further plate 9 without play.